PTO/SB/05 (03-01)

Approved for use through 10/31/2002. OMB 0651-0032 U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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UTILITY PATENT APPLICATION TRANSMITTAL

Attorney Docket No. First Inventor		CSI 130					
		Donald L. Wise					
Title	Vaccines to Induce Mucosal Immunity						
F.,,,,,,,	14-11 111	(a) EL 717746004 LIC					

IKANSIVIITIAL			vaccines to induce	iviucos	ai iiii	munity			
(Only for new nonprovisional applications under 37 CFR 1.53(b))			Express Mail Label No. EL 717746904 US						
	TION ELEMENTS cerning utility patent application conten		ADDRESS TO: Assistant Commissioner for Patents Box Patent Application Washington, DC 20231						
1. See Transmittal F (Submit an original and a 2. Applicant claims s See 37 CFR 1.27 3. Specification (preferred arrangemen ' - Descriptive title - Cross Referenc - Statement Reg - Reference to se or a computer p - Background of - Brief Summary - Brief Descriptio - Detailed Descri - Claim(s)	orm (e.g., PTO/SB/17) duplicate for fee processing) mall entity status. [Total Pages 37] t set forth below) of the invention the to Related Applications arding Fed sponsored R & D equence listing, a table, program listing appendix the Invention of the Invention n of the Drawings (if filed) ption	7. [8. N (<i>i</i> a. b.	CD-ROM or CD-Ricomputer Program ucleotide and/or Amino Af applicable, all necessal Computer Reada Specification Sequence i. CD-ROM ii. paper Statements verify ACCOMPANYING Assignment Paper 37 CFR 3.73(b) S	(Appendication (Appen	ence S (CRF) n: 2 copie	Submission es); or cove copies ON PARTS			
- Abstract of the Disclosure 4.						11. English Translation Document (if applicable) 12. Information Disclosure Statement (IDS)/PTO-1449 Copies of IDS Statement (IDS)/PTO-1449 Citations 13. Preliminary Amendment 14. Return Receipt Postcard (MPEP 503) (Should be specifically itemized) 15. Certified Copy of Priority Document(s) (if foreign priority is claimed) 16. Nonpublication Request under 35 U.S.C. 122 (b)(2)(B)(i). Applicant must attach form PTO/SB/35 or its equivalent.			
18. If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in a preliminary amendment, or in an Application Data Sheet under 37 CFR 1.76: Continuation Divisional Continuation-in-part (CIP) Of prior application No.: For CONTINUATION OR DIVISIONAL APPS only: The entire disclosure of the prior application, from which an oath or declaration is supplied under Box 5b, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference. The incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts.									
Customer Number or Bar Co		F . 1		Correspon	dence a	ddress below			
Name		TRADEMARK OFFIC							
Address	2000 One Atlantic Center 1201 West Peachtree Street	84-4-	In.	—		20000 2122			
City Country	Atlanta United States	State Telephone	GA 404-817-8473	Zip (30309-3400			
						404-817-8588			
Name (Print/Type)	Rivka D. Monheit	Re	gistration No. (Attome	y/Agent)	48,7				
Signature	Richa D. Rouhert			Date	July	3, 2003			

Burden Hour Statement: This form is estimated to take 0.2 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Box Patent Application, Washington, DC 20231.

10/6/3975 10/6/3975 07/03/03

Approved for use through 04/30/2003. OMB 0651-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Not yet assigned

July 3, 2003

CSI 130

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
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Art Unit

Attorney Docket No

CEE TO A NOMITTAL	Complete if Known			
FEE TRANSMITTAL	Application Number	Not yet assigned		
for FY 2003	Filing Date	July 3, 2003		
	First Named Inventor	Donald L. Wise		
Effective 01/01/2003. Patent fees are subject to annual revision.	Examiner Name	Not yet assigned		
Applicant claims small entity status. See 37 CFR 1.27		No. 1		

(\$) 384.00

TOTAL AMOUNT OF PAYMENT

METHOD OF PAYMENT (check all that apply)	FEE CALCULATION (continued)					
Check Credit card Money Other None	3. ADDITIONAL FEES					
Deposit Account:	Large Entity Small Entity					
Deposit Account 50-1868		Fee Fee Code (\$) Fee Description		Fee Description	Fee Paid	
Number	1051	130	2051	65	Surcharge - late filing fee or oath	
Deposit Account Name Holland & Knight LLP	1052	50	2052	25	Surcharge - late provisional filing fee or cover sheet	<u> </u>
The Commissioner is authorized to: (check all that apply)	1053	130	1053		Non-English specification	├── -
Charge fee(s) indicated below Credit any overpayments	1812	2,520	1812	2,520	For filing a request for ex parte reexamination	
Charge any additional fee(s) during the pendency of this application	1804	920*	1804	920*	Requesting publication of SIR prior to Examiner action	
Charge fee(s) indicated below, except for the filing fee to the above-identified deposit account.	1805	1,840*	1805	1,840*	Requesting publication of SIR after Examiner action	
FEE CALCULATION	1251	110	2251	55	Extension for reply within first month	
1. BASIC FILING FEE	1252	410	2252	205	Extension for reply within second month	├ ─
Large Entity Small Entity	1253	930	2253	465	Extension for reply within third month	
Fee Fee Fee Fee Pee Pee Pee Paid Code (\$) Code (\$)	1254	1,450	2254	725	Extension for reply within fourth month	
1004 750 2004 275 Hillity Sling for	1255	1,970	2255	985	Extension for reply within fifth month	├
1001 730 2001 375 Offinity limits lee 375.00	1401	320	2401	160	Notice of Appeal	·
1003 520 2003 260 Plant filing fee	1402	320	2402		Filing a brief in support of an appeal	
1004 750 2004 375 Reissue filing fee	1403	280	2403	140	Request for oral hearing	
1005 160 2005 80 Provisional filing fee	1451	1,510	1451	1,510	Petition to institute a public use proceeding	
SUBTOTAL (1) (\$) 375.00	1452	110	2452	55	Petition to revive - unavoidable	
	1453	1,300	2453	650	Petition to revive - unintentional	
2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE	1501	1,300	2501	650	Utility issue fee (or reissue)	
Extra Claims below Fee Paid	1502	470	2502	235	Design issue fee	
Total Claims 21 -20 1 x 9.00 = 9.00	1503	630	2503	315	Plant issue fee	
Claims - 3" = 0	1460	130	1460	130	Petitions to the Commissioner	
Multiple Dependent	1807	50	1807	7 50	Processing fee under 37 CFR 1,17(q)	
Large Entity Small Entity Fee Fee Fee Fee Fee Description	1806	180	1806	3 180	Submission of Information Disclosure Stmt	
Code (\$) Code (\$)	8021	40	802	1 40	Recording each patent assignment per property (times number of properties)	
1202 18 2202 9 Claims in excess of 20 1201 84 2201 42 Independent claims in excess of 3	1809	750	2809	375	Filing a submission after final rejection (37 CFR 1.129(a))	
1203 280 2203 140 Multiple dependent claim, if not paid	1810	750	2810	375	For each additional invention to be	
1204 84 2204 42 ** Reissue independent claims over original patent	1801	750	2801	375	examined (37 CFR 1.129(b)) Request for Continued Examination (RCE)	
1205 18 2205 9 ** Reissue claims in excess of 20	1802	900	1802	900	Request for expedited examination	
and over original patent	0.50	fon /a-	ooit i		of a design application	
SUBTOTAL (2) (\$) 9.00		fee (sp		Filipa F	ee Paid	
**or number previously paid, if greater; For Reissues, see above	*Reduced by Basic Filing Fee Paid SUBTOTAL (3) (\$) .00					
SUBMITTED BY (Complete (if applicable)						
Name (Print/Type) Rivka D. Monheit Registration No. 48,731 Telephone (404) 817-8514						

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

D. Monheit

Signature

(Attorney/Agent)

This collection of information is required by 37 CFR 1.17 and 1.27. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Washington, DC 20231.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: Donald L. Wise, Debra J. Trantolo, David D. Hile and Stephen A. Doherty

Serial No.: Express Mail Label No.: EL 717746904 US

Filed: July 3, 2003 Date of Deposit: July 3, 2003

For: VACCINES TO INDUCE MUCOSAL IMMUNITY

Mail Stop Patent Application Commissioner of Patents and Trademarks Alexandria, VA 22313-1450

EXPRESS MAIL TRANSMITTAL LETTER FOR PATENT APPLICATION AND CERTIFICATE OF MAILING

Sir:

Pursuant to 35 U.S.C. § 21(a) as amended by Public Law 97-247 and 37 C.F.R. § 1.10, applicants enclose for filing the attached patent application entitled "Vaccines to Induce Mucosal Immunity", which claims priority to U.S.S.N. 60/393,777 filed July 3, 2002. The application includes 1 page of abstract, 34 pages of specification, 2 pages of claims, 1 sheet of formal drawing, and an unexecuted Declaration for Patent Application. An executed Declaration for Patent Application, Assignment of rights in the application from Donald L. Wise, Debra J. Trantolo, David D. Hile and Stephen A. Doherty to Cambridge Scientific, Inc., Power of Attorney or Authorization of Agent, and a Statement Under 37 C.F.R. § 3.73(b) will be submitted shortly.

This application contains nucleic acid and/or protein sequences as defined in 37 C.F.R. §§ 1.821-1.825. Pursuant to 37 C.F.R. §§ 1.821-1.825, applicants enclose a 3½" diskette

Title: VACCINES TO INDUCE MUCOSAL IMMUNITY

Filed: JULY 3, 2003

Express Mail Transmittal Letter for

Patent Application and Certificate of Mailing Express Mail Label No.: EL 717746904 US

Date of Deposit: July 3, 2003

containing a computer-readable form of the Sequence Listing for the above-identified

application. A paper copy of the Sequence Listing is incorporated into the application.

I declare that the material on the diskette is identical to the paper copy of the Sequence

Listing present in the above-identified application, and that all statements made on information

and belief are believed to be true and further that these statements were made with the

knowledge that willful false statements may jeopardize the validity of the application or any

patent issuing thereon.

Commissioner is authorized to charge Deposit Order Account No. 50-1868 in the amount

of \$384.00 to cover the filing fee for a small entity. It is believed that this is the proper filing fee

for a small entity as the application contains 3 independent claims, and a total of 21 claims.

This application is entitled to claim small entity status under 37 C.F.R. § 1.27.

This application is being filed on July 3, 2003 by mailing the application to Box Patent

Application, Commissioner of Patents and Trademarks, Alexandria, VA 22313 via the United

States Postal Service "Express Mail Post Office to Addressee" service under 37 C.F.R. § 1.10.

The Express Mail label number appears in the heading of this paper which is attached to the

application papers pursuant to 37 C.F.R. § 1.10(b).

The Commissioner is hereby authorized to charge any additional fees that may be

required, or credit any overpayment in connection with this application, to Deposit Order

Account No. 50-1868. To facilitate this process, applicants have enclosed a duplicate of this

transmittal.

077044/00010

2

Title: VACCINES TO INDUCE MUCOSAL IMMUNITY

Filed: JULY 3, 2003

Express Mail Transmittal Letter for Patent Application and Certificate of Mailing Express Mail Label No.: EL 717746904 US

Date of Deposit: July 3, 2003

All correspondence concerning this application should be mailed to:

Patrea L. Pabst, Esq. HOLLAND & KNIGHT LLP Suite 2000, One Atlantic Center 1201 West Peachtree Street, N.E. Atlanta, Georgia 30309-3400

(404) 817-8473 (Telephone) (404) 817-8588 (Fax)

Respectfully submitted,

Rivka D. Monheit

Reg. No. 48,731

Date: July 3, 2003

HOLLAND & KNIGHT LLP Suite 2000, One Atlantic Center 1201 West Peachtree Street, N.E. Atlanta, Georgia 30309-3400 (404) 817-8514 (Telephone) (404) 817-8588 (Fax) Title: VACCINES TO INDUCE MUCOSAL IMMUNITY

Filed: JULY 3, 2003

Express Mail Transmittal Letter for

Patent Application and Certificate of Mailing Express Mail Label No.: EL 717746904 US

Date of Deposit: July 3, 2003

CERTIFICATE OF MAILING UNDER 37 C.F.R. § 1.10

I hereby certify that this Express Mail Transmittal Letter for Patent Application and

Certificate of Mailing and any documents referred to as attached therein are being deposited with

the United States Postal Service on this date, July 3, 2003, in an envelope as "Express Mail Post

Office to Addressee" service under 37 C.F.R. § 1.10, Express Mail Label No. EL 717746904 US,

addressed to Box Patent Application, Commissioner of Patents and Trademarks, Alexandria, VA

22313.

<u>Pam Turnbough</u>

Date: July 3, 2003

ATL1 #583855 v1

CSI 130 077044/00010